

Frequently Asked Questions for Multicooker Decontamination of N95 Respirators



Homeland Security

Science and Technology

Q: WHEN SHOULD I CONSIDER DECONTAMINATING MY MASK FOR REUSE?

A: N95 and other filtering facepiece respirators are normally treated as single use items. The only time one should consider decontaminating them for reuse is in critical supply shortage situations where there is a need for respiratory protection and mask supplies are not sufficient to provide protection to those who need it.

Q: WHAT IF MY MASK IS VISUALLY SOILED FROM USE?

A: If your mask has been visually soiled with bodily fluids or other potential contaminants, then the mask should be discarded.

Q: HOW CAN I USE A MULTICOOKER TO DECONTAMINATE N95 RESPIRATORS?

A: The multicooker technique uses moist heat to quickly decontaminate the masks from SARS-CoV-2.

Q: WHAT MODELS OF MULTICOOKERS ARE ACCEPTABLE TO DECONTAMINATE N95 RESPIRATORS?

A: Any multicooker that can be set so that it holds the temperature at 149 °F (65 °C) for 30 minutes. This is readily achieved by multicooker models that have the sous vide function. Examples of such multicookers include:

Make	Model
Instant Pot®	Duo Evo Plus (6 or 8 Quart) Aura Pro Multi-Use Duo Crisp Viva
Gtime	Electric Pressure Cooker (6 or 8 Quart)
Luby	Electric pressure cooker
Geek Chef®	11-in-1 Multi-Functional Cooker

Q: CAN I DECONTAMINATE MY MASK USING THIS METHOD?

A: S&T has demonstrated efficacy for four mask types while the CDC and some manufacturers have indicated that moist heat is effective for other models as well. Masks for which moist heat has been reported as not degrading performance by the manufacturer, CDC, or in testing by DHS S&T include¹:

- 3M models: 1860², 1870+, 8000, 8004, 8210², 8511²
- Kimberly Clark model: PFR-95
- Moldex models: 2200, 2201
- Northern Safety model: 7210²

¹<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html>;

<https://multimedia.3m.com/mws/media/1824869O/decontamination-methods-for-3m-filtering-facepiece-respirators-technical-bulletin.pdf>; Bergman, M. et al., J. Engineered Fibers and Fabrics, 2010, 5(4), pp. 33-41; Bergman, M. et al. J. ISRP, 2011, 28(1), pp. 48-59. Viscusi, D.J., et al. J. Occupational and Environmental Hygiene, 2011, 8(7), pp. 426-36. Heimbuch, B.K., et al., Am. J. of Infection Control, 2011, 39(1), pp. e1-e9

² Masks models that S&T have tested



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This is not a comprehensive list and technical information from the mask manufacturer should be consulted before moist heat is used to decontaminate a mask for reuse.

Q: WHAT SHOULD I DO IF SOMETHING LOOKS WRONG ABOUT MY MASK?

A: If visual inspection shows that the filter fabric/media, straps, nose pads, or any other parts of the mask have been compromised then the mask should be discarded.

Q: CAN I JUST PLACE MY MASK IN THE WATER?

A: No, placing the mask in the water will damage the filter media and potentially other components of the mask making it ineffective.

Q: WHY DO I NEED TO USE A PAPER BAG WITH THIS METHOD?

A: The paper bag is permeable to steam (water vapor), but limits the mask's water absorption so that virus inactivation is possible while the mask's performance is not impacted.

Q: CAN I USE A DIFFERENT SETTING ON THE MULTICOOKER TO PERFORM THIS TREATMENT?

A: It is possible that other settings will work, but different times or temperatures may not kill the virus or may damage the mask. This procedure has been demonstrated by research to be effective; hence, S&T recommends that the temperature and time for this treatment be strictly adhered to.

Q: HAVE THESE EFFORTS BEEN REVIEWED OR APPROVED BY THE U.S. FOOD AND DRUG ADMINISTRATION?

A: No. These statements have not been reviewed or approved by the U.S. FDA. Individuals assume all responsibility and risk for the use of these instructions for the best practices to decontaminate previously worn FFRS. DHS does not assume any liability for the instructions for best practices contained herein nor do such instructions for best practices create any warranty. Reliance on such instructions for best practices is solely at your own risk. Further, it is important to note that there are multiple steps and variables which may create risk depending upon how the user implements the instructions for best practices.

